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ABSTRACT

An analysis of the nature of the lexical borrowing of Icelandic from American English focuses on the phonological processes occurring in the adoption of American English forms. Background information on borrowing in Icelandic is provided, and a crucial distinction is made between aural borrowing and loanwords from written sources. The role of syllabic structure in the borrowing process is investigated, and it is argued that a syllabic structure constraint regulates the insertion of the minimal consonant /h/. It is further argued that when this constraint applies, consonant length is inferred from vowel length and not vice versa. (MSE)

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Lexical Borrowing in Mandarin Icelandic and Syllabic Structure Constraints

by

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LEXICAL BORROWING IN MODERN ICELANDIC AND SYLLABIC STRUCTURE CONSTRAINTS

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In the last forty years, Modern Icelandic has borrowed extensively from American English. However, the phonological systems of the two languages differ considerably and extensive phonological changes are required when American English forms are adopted. The nature of lexical borrowing in Modern Icelandic and the phonological processes involved are discussed in detail below. In Section 1, background information is provided and a crucial distinction is made between aural borrowings and loanwords from printed sources. In Section 2, the role of syllabic structure in the borrowing process is investigated and it is argued that a Syllabic Structure Constraint regulates the insertion of the "minimal consonant" /h/. It is further argued that when this constraint applies consonant length is inferred from vowel length, and not vice versa. This parallels Garnes' 1976 perception tests, in which vowel length rather than consonant length was also taken as basic [1].

1. Background Information

It has often been said that Icelandic has remained unchanged for a thousand years. Although this is not literally true, the language has changed surprisingly little since the settlement of Iceland in the ninth century, a fact often attributed to Iceland's relative isolation from the rest of the world. Massive vowel shifts have occured, but orthographic representations have remained the same and speakers of Modern Icelandic understand Old Icelandic texts with almost no difficulty.

Its former isolation and its relatively sudden emergence into the twentieth century world make Iceland a particularly fruitful site for the study of linguistic borrowing. During the last forty years, Icelandic has been influenced by American English and has experienced a greater rate of lexical change than ever before. In this sense, one could say that the language has changed more since World War II than during the preceding millenium. Since the establishment of an American military base at Keflavík, Icelanders have been exposed to American English to an unprecedented degree through contact with native speakers, published material, the American

radio station and American television programs.

AE borrowings appear to be particularly prevalent in the speech of teenagers and frequently involve musical terminology, reflecting the influence of rock culture in Iceland. Consider the following nouns: [rOhk] 'rock', [rOhkmu:sik] 'rock music', [alpum] 'album', [sou:louIstI] 'soloist', [tsjass] 'jazz', [k'OnsERt] 'concert', [p'öŋkarI] 'punker', [stu:tiou:] 'studio', [saksafou:n] 'saxaphone' (AS), [k'assEhta] 'cassette', [sIntEsai:sEr] 'synthesizer', [hIhpar] 'Hippies' (NP), [hass] 'hash', [t'öffarI] 'tough guy', [t'öfkjai:] 'tough guy', [E:kout'rIhpI] 'ego trip', [t'Ohpp'la:t'a] 'top record' and [rOhkstjartna] 'rock star'. (Using the terminology of Haugen 1972, the last two forms cited are loanblends: a borrowed form is combined with a native one.) Some verb constructions associated with rock culture are [mIksa sauntI.] 'mix the sound', [t'ju:na ki:t'arIn] 'tune the guitar', [tsjamma] 'jam', [töppa] 'dub', and [fi:la rIθman] 'feel the rhythm'. Note also the verb particle construction [fri:k'a u:t] 'freak out'.

Other borrowings, not necessarily limited to the speech of teenagers, include the nouns [si:karEhta] 'cigarette', [sjou:körtL] 'showgirl', [k'a:rat'E] 'karate', [sjampou] 'shampoo', [tsju:s] 'juice', [pOtti] 'car body', [hutt] 'car hood', [mou:tEl] 'car model', [hou:t'El] 'hotel', [tsjOpp] 'job', [hampOrkarI] 'hamburger', [pIsnEs] 'business', [pransI] 'branch of business', [k'a:parEht] 'cabaret', [vi:tEou:] 'video', [p'aRti] 'party', [k'a:lOri:a] 'calory', [krammafou:n] 'grammaphone', [k'OrtNflEksI] 'cornflakes', [fou:t'ousElla] 'photo cell', [pei:k'On] 'bacon', [pou:k'Er] 'poker' (game) and the loanblend [sprei:pru:sa] 'spray can'. Adjectives include [t'Ihpt'Ohp] 'tip-top', [nErvYs] 'nervous' and [k'ju:t] 'cute' (NSF). Adverbs include [Olrait] 'alright' and [fIftIfIftI] '50-50'. Some verbs are [sjOhpa] 'shop', [stOhpa] 'stop', [trOhpa In] 'drop in' and [pIhka u:t] 'pick out'. Additional verbs are easily derived from borrowed nouns, cf. [rIffa] 'play a jazz riff', [tsjassa] 'play jazz', [p'Ohpa] 'play in pop style', [ki:ra] 'change gears' and [stnOppa] 'be a snob'.

In several cases, a borrowed form competes with a preexisting native form, and may eventually replace it. Thus, [t'ei:p'I] 'magnetic tape' is in competition with [sE:ɣYlpant] (magnetic band); [t'raktOr] 'tractor' competes with [trauhtarvjE:l] (pulling machine); [k'OnsERt] 'concert' is in competion with [t'ou:nlei:k'ar] (tone plays); [t'aksI] 'taxi' is in competition with [lei:ɣYpi:l] (rented

car) and [paht'Eri:a] 'battery' competes with [ra:vLa:ʔa] (amber storehouse).

In MI, the vast majority of borrowings appear to be nouns. This is in accordance with universal tendencies. In Haugen 1972, for example, it is reported that 75% of the AE borrowings in American Norwegian are nouns. The assignment of gender to MI loan nouns appears to be a complex and partially random process. MI shows three gender classes, each incorporating "weak" and "strong" subclasses. Frequently, borrowed nouns are employed without the addition of a nativizing case/number/gender suffix. In such cases, borrowings are usually assigned to the strong neuter class, cf. [sjampou:] 'shampoo', [pei:k'On] 'bacon', [kallEri] 'gallery', [p'rou:kram] 'program', [strEss] 'stress' and [hutt] 'car hood'. (This parallels the findings of Stefánsson 1903, where 60% of the AE borrowings in Dakota Icelandic were assigned neuter gender.) Apparently, no borrowings are assigned to the weak neuter class. However, since native strong masculine nouns often show stem final /r/, /s/, /l/ or /n/, loanwords with this consonantism may be assigned to the strong masculine class, cf. [ki:r] 'gear', [t'raktOr] 'tractor', [pou:nYs] 'bonus', [sjans] 'chance', [si:fIlIs] 'syphilis', [pERk'jIl] 'tuberculosis' (AS) and [k'aftei:n] 'captain' (AS). Occasionally, a loanform is assigned to the strong masculine class because its referent suggests natural masculine gender, cf. [stu:'Ent] 'student' and [aRk'jIt'Ekt] 'architect'. [a:rIstouk'rat] 'aristocrat', though, is neuter. Very occasionally, a loanword is "forced" into the strong masculine class through affixation of the standard strong nominative singular masculine suffix /Yr/, cf. [k'luppYr] 'club' and [mammut'Yr] 'mammoth'. Certain other forms receive the suffix /I/, marker of the weak masculine class, cf. [sjEffI] 'chief', [anaRk'jIstI] 'anarchist', [rIθmI] 'rhythm' and [pransI] 'branch'. Loanwords with final syllable /joun/ are assigned to the strong feminine category, cf. [vErsjoun] 'version' and [Imp'rEsjoun] 'impression', while loans with final /a/ are assigned to the weak feminine class, cf. [kou:rIlla] 'gorilla'. Again, loanwords may be "forced" into the weak feminine class by the suffixation of /a/, which marks that category, cf. [pa:sIlla] 'bacillus' and [sElla] 'cell'.

At this point, it is necessary to make a crucial distinction between aural loans and loans from printed sources. Aural loans are those nouns actually overheard by Icelanders in the speech of Americans. A subcategory of this class would include those items

introduced into the MI lexicon by Icelanders fluent in English. The pronunciation of aural loans is as close to the AE pronuncation as possible within the limits of the MI phonetic system. In the case of forms borrowed from printed sources, on the other hand, the AE orthographic representation is pronounced according to Icelandic orthographic conventions, resulting in a spelling pronunciation radically different from the AE pronunciation. This spelling pronunciation then gains acceptance as the correct Icelandic version of the item in question. Loanwords clearly of the aural class include [sjou:körtL] 'showgirl', [pei:k'On] 'bacon', [tsju:s] 'juice', [pIsnEs] 'business', [Olrait] 'alright', [t'öfkjai:] 'tough guy', [nai:lOn] 'nylon', [hutt] 'car hood', [ki:r] 'gear' and [k'OrtNflEksi] 'cornflakes'. Here, spelling pronunciations would result in surface forms vastly different from those actually attested. Only minimal phonetic changes occur. In [t'öfkjai:], for example, /k/ undergoes a rule of palatalization since, in native forms, a palatal glide is always inserted between /k/ and the diphthong /ai/ in anticipation of the diphthong final high vowel, cf. [kjai:vI] 'give' (1 sg past subj). Loanwords clearly originating from printed sources include [ra:tar] 'radar', [k'a:rat'E] 'karate', [sjampou:] 'shampoo', [vi:tEou:] 'video', [mou:tEl] 'model' and [E:kout'rIhpI] 'ego trip'. Note the spelling pronunciations, which include "continental vowels".

When spelling pronunciations would produce the same result as aural borrowing, it is not possible to determine which of the two processes originally accounted for the form. Nouns of ambiguous origin include [sou:lou:] 'solo', [t'ri:ou] 'trio', [pou:nYs] 'bonus' and [strEss] 'stress'. Occasionally, unusual distortions suggest that a form was originally borrowed from a printed source, but subsequently underwent phonological simplification after entering the Icelandic lexicon. Such forms include [pERk'jIl] 'tuberculosis', [p'Enstlin] 'penicillin' and [ma:k'ari:nI] 'margarine'. For further background information on loanwords in Modern Icelandic, see Jones 1964 and Groenke 1966 and 1975, where nontechnical discussions of the borrowing process are provided.

2. The Role of Syllabic Structure

In Hooper 1976 (An Introduction to Natural Generative Phonology), it is suggested that Syllable Structure Conditions (here, Syllabic Structure

Constraints) play a major role in the adoption of foreign forms universally, and that language specific "minimal vowels" are inserted in borrowed strings when required by these constraints. SSC's operate both diachronically and synchronically. In Spanish, for example, the string /sC/ is blocked syllable initially. Historically, /e/, the minimal vowel of Spanish, was prefixed to such strings, cf. [Eslábo] 'Slav' and [Eskwéla] 'school', where the underlined vowels are accounted for by the SSC. The corresponding Latin forms have initial consonant clusters. Further, the same SSC is evidenced synchronically in the utterances of Spanish speakers in English, e.g. [Eskúl] 'school'; [Estór] 'store'. In Japanese, apparently, the vowel employed is determined by the preceding consonant. Since restrictions on syllable initial consonant clusters are much more severe in Japanese than in English, AE 'brake' appears as [bure:ki] (Hooper 1976), while 'drama' becomes [dorama] (Haugen 1972). In Modern Icelandic, though, it appears that considerations of syllabic structure account for the insertion not of a minimal vowel, but of a minimal consonant, /h/.

Consider the AE stop series /p t k/ and /b d g/. Syllable initially preceding the stress, AE /p t k/ generally have VOT > 0 and surface as [p' t' k']. AE /b d g/, on the other hand, range from VOT < 0 to VOT = 0. Modern Icelandic, however, has no prevoiced stop series. The underlying stop series are /p' t' k'/ and /p t k/. MI /p t k/ show VOT of approximately zero in all environments, while MI /p' t' k'/ are clearly aspirated word initially. In other environments, the VOT for /p' t' k'/ normally approaches zero as well, though the aspirated pronunciation is still permissible in careful speech, cf. /va:k'a/, [va:k'a] or [va:ka] 'be awake'. Since AE /p t k/ may have VOT > 0, they are typically borrowed as MI /p' t' k'/. AE /b d g/, on the other hand, correspond to the remaining MI stop series -- unaspirated /p t k/. Thus far, there is a one to one correspondence between the six AE stops and the six MI stops.

For the first segment of a stressed syllable, these correspondences hold without exception, cf. (1).

(1) [p'i:anou:] 'piano'; [t'ju:na] 'tune'; [k'assEhta] 'cassette' vs. [pIsnEs] 'business'; [tIskou] 'disco'; [ki:r] 'gear'.

Following a MI tense vowel -- /i/, /u/ or a diphthong ending in one of these segments -- the one to one correspondence still holds, cf. (2).

(2) [t'ei:p'I] 'tape'; [k'ju:t'ar] 'cute' (NPF); [pei:k'On] 'bacon' vs. [li:pEra:lI] 'liberal', [li:tEr] 'leader' ; [si:karEhta] 'cigarette'.

Paradoxically, though, following the MI lax vowels /I E Y ö O/, a completely different set of correspondences applies. AE voiceless stops correspond to MI preaspirated stops, cf. (3).

(3) [p'Ohp] 'pop music'; [si:karEhta] 'cigarette'; [pIhka u:t] 'pick out'.

In the same environment, AE voiced stops appear as MI voiceless geminates, cf. (4).

(4) [töppa] 'dub'; [rEtti] 'ready' ; [tsjOkka] 'jog'.

It seems that a partial explanation for this data can be found in the prosodic structure of the Icelandic syllable. In polysyllabic forms, a single intervocalic consonant is assigned to the subsequent syllable (/V$CV/), but syllable boundary normally occurs between two adjacent consonants (/VC$CV/). On the surface, the strings [V́:C#], [V́:$CV], [V́CC#] and [V́C$CV] occur, but *[V́$CV] and *[V́:C$CV] are impossible. Surface long vowels can be derived from underlying vowels by the rule of VOWEL LENGTHENING (cf. Richter 1982).

VOWEL LENGTHENING:

$$V \;\; [+\text{stress}] \;\; \begin{Bmatrix} \$ \\ C \; \# \end{Bmatrix} \rightarrow [+\text{long}]$$

The rule insures that a stressed vowel is lengthened before a syllable boundary or before a word final consonant. We can assume that at an earlier stage of the derivation, a rule of STRESS ASSIGNMENT applies, assigning main stress to the first vowel of each word.

On the surface, though, the system is ambiguous: vowel length can be inferred from consonant length and vice versa, other things being equal. At this point, then, motivation must be provided for the claim that the feature value [+long] is, in fact, assigned to vowels and not to consonants, and that the rule of VOWEL LENGTHENING is correct as formulated. Consider the derivation of the following forms under two distinct grammars: [mEnn] 'men'; [mE:n] 'necklace'; [mEns] 'necklace' (GS) (cf. Garnes 1976). Grammar A

assumes underlying consonant length, while in Grammar B, underlying vowel length is assumed.

GRAMMAR A: UNDERLYING LONG CONSONANTS

mEnn	mEn	mEn-s
	VOWEL LENGTH.	
[mEnn]	[mE:n]	[mEns]
'men'	'necklace'	'necklace' (GS)

GRAMMAR B: UNDERLYING LONG VOWELS

mEn	mE:n	mE:n-s
CONS LENGTH.		VOWEL SHORTENING
[mEnn]	[mE:n]	[mEns]
'men'	'necklace'	'necklace' (GS)

Clearly, where Grammar B requires two rules -- CONSONANT LENGTHENING and VOWEL SHORTENING, Grammar A requires only one rule -- VOWEL LENGTHENING. Phonologically, then, we can propose that consonantal length is basic and that vowel length is derived. Given the rule of VOWEL LENGTHENING, all and only the permissible strings are generated. It now appears that the loanwords discussed can be accounted for by the following general principle: In loanwords, stressed lax vowels must surface short.

At this point, we can review in detail the loanword data presented earlier. It will be seen that in all cases, in accordance with this general principle, a choice is first made concerning the length of the vowel, and then, if necessary, the consonants are adjusted so that they will be correct, given the permissible segment strings listed above. Consider first those loanforms which contain a tense vowel followed by a stop --recall (2). Here, the rule of VOWEL LENGTHENING applies where applicable and no further changes are required. (Thus, in a loanform, a tense vowel may surface long even when the tense vowel in the corresponding AE form is quite short, recall [fri:ka u:t] 'freak out'.) Consider, though, the MI forms with a lax vowel followed by a consonant corresponding to an AE voiced stop --recall (3). Since the string *[V́$VC] cannot occur in Icelandic, pronunciations such as *[tŏpa], *[rE$ti] and *[tsjO$ka] are blocked. The closest permissible surface structures are [V́:$CV] and [V́C$CV]. Since stressed lax vowels must surface short, the structure [V́C$CV] is taken as correct. This structure acts as a SCC or "template" to which the given strings must conform. Thus, the consonants in these strings

undergo gemination. VOWEL LENGTHENING is no longer applicable and the lax vowels surface short. The same process occurs in such loanforms as [sElla] 'cell' and [rIffa] 'play a jazz riff', in which lax vowels precede segments other than stops. Again, the postvocalic segments surface as geminates, and the lax vowels surface short. Finally, recall the MI forms with a lax vowel followed by a consonant corresponding to an AE voiceless stop. Again, the closest possible surface structures are [V́:$CV] and [V́C$CV]. Again, since lax vowels must surface short, the structure [V́C$CV] is taken as correct. Interestingly, though, the AE voiced and voiceless stops are not neutralized. Instead, in the adoption of AE forms with lax vowels followed by voiceless stops, preaspirated stops are substituted for the AE segments discussed. This solution seems well suited to the forms in question. Although the AE voiced/voiceless distinction cannot be maintained, a MI geminate/preaspirate distinction appears in its place. Since the syllabic structure of MI requires two intervocalic consonants in forms like those under (4), it appears that the "minimal consonant" /h/ is inserted in the appropriate position. Thus, AE 'freak out', with tense /i/, corresponds to MI [fri:k'a u:t], with a long vowel, while AE 'pick out', with lax [I], corresponds to MI [pIhka u:t], with a short vowel plus preaspirated consonant. This result is particularly interesting since the structure [V:$CV] is frequent in native forms, cf. [vI:k'a] 'week', [rE:k'a] 'rake' (noun) and [mO:k'a] 'rake' (verb).

Finally, note that the lexical borrowing data discussed above parallel Garnes' 1976 instrumental findings. In Garnes' perception tests, synthesized [V:C:] was perceived as [V:C], while synthesized [VC] was perceived as [VC:]. Here, again, it was the duration of the vowel which was taken as "correct", and from which the duration of the consonant was inferred. In the phonological description of the language, however, consonant length was taken as basic, while vowel length was derived by rule. Thus, it seems paradoxical that in the process of lexical borrowing and in Garnes' perception tests, vowel length is taken as basic, while consonant length is derived. However, this is probably a pseudoproblem. Phonologically, the positing of long underlying consonants is justified. Árnason (1978) agrees with this position:

> The paradox between the formal analysis that length of vowels is predictable on the basis

of...the following consonantism, and Garnes' experimental results is natural and only to be expected. The formal analysis can be seen as an abstraction...whereas the analysis of vowel [length] as distinctive is relevant to psychological linguistics. Both are valid.

FOOTNOTES

1. The analysis is based on original field work in Reykjavík, September through December, 1981 and May 1984. Phonetic details are those of Reykjavik speech, the most prevalent dialect. Below, unless otherwise indicated, nouns are cited in their nominative singular forms and verbs are cited in their infinitival forms. Phonetic representations appear in [ ] brackets, while underlying representations are enclosed in slashes. In phonetic transcriptions, standard IPA symbols are adopted with the following exceptions: a=ɑ; E=ɛ; O=ɔ; ö=œ ; MNŋLR=voiceless mnŋlr, respectively. Aspiration is indicated with an apostrophe. In Icelandic forms, primary stress invariably falls on the first syllable. Abbreviations are as follows: AE=American English; AS=Accusative Singular; GS=Genitive Singular; MI=Modern Icelandic; NP=Nominative Plural; NPF=Nominative Plural Feminine; NSF=Nominative Singular Feminine; sg=singular; SSC=Syllabic Structure Constraint; subj=subjunctive; VOT=Voice Onset Time; $=Syllable Boundary.

REFERENCES

Árnason, Kristján. 1978. Quantity, stress and the syllable in Icelandic: Formal vs. functional arguments. Nordic prosody, ed. E. Garding et al., pp. 137-142. Lund.

Garnes, Sara. 1976. Quantity in Icelandic: Production and perception. Hamburg: Buske Verlag.

Groenke, Ulrich. 1966. On standard, substandard and slang in Icelandic. Scandinavian studies 38.217ff.

Groenke, Ulrich. 1975. Sletta and gǫtumal: On slangy borrowings in Icelandic. The Nordic languages and modern linguistics 2, ed. Karl Hampus Dahlstedt, 475ff. Umeå: Almqvist and Wiksell.

Haugen, Einar. 1972. The analysis of linguistic borrowing. Studies by Einar Haugen, ed. E. Firchow et al. The Hague: Mouton.

Hooper, Joan. 1976. An introduction to natural generative phonology. New York: Academic Press.

Jones, Oscar. 1964. Some gǫtumal expressions. Scandinavian studies 36.59ff.

Richter, Gregory. 1982. A generative phonology of Modern Icelandic. Ph.D. dissertation, University of California, San Diego.

Stefansson, W. 1903. English loan nouns used in the Icelandic colony of North Dakota. Dialect notes 2.354ff.